

The Values of Competition in Learning

for Elementary Age Children

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Rationale for Cooperative Competition

Cooperative learning has become a respected theory to practice in the classroom. Cooperative learning is based on theories of Vygotsky and Piaget implying that social interaction among children doing developmentally appropriate tasks will increase their understanding of skills and concepts. (McLene, p. 3) The cooperative learning theory is based on sound principals and practices, yet many proponents feel that competition does not fit with cooperative learning. The phrase cooperation vs. competition is used in much of the literature promoting cooperative learning. I do not feel that the two terms should be used as opposing theories. I believe there is value in both cooperation and competition that need to be taught to our children in the proper way.

The use of Competition with elementary age children has been a controversial subject. There are those who believe that it has a negative affect on the proper growth of a child. Many have the picture of Little League coaches fighting it out on the field, sometimes even hollering at the children. It is true there are negative things that can happen in competition but there are also many negative things that can happen in other educational experiences. Competition is a part of life. Children learn how to be good winners and losers through competition. At what age can children handle competition? In studying the development of children, we find that at age eight to nine the memorization skills start to peak and at age ten to eleven, children love to compete.

In this paper I would like to deal with the positive aspects of a Cooperative-Competition strategy that can be used in teaching elementary age children. I will show the educational values and social values of this strategy and how the positive can vastly outweigh any negative results. "Competition is good when it encourages them to do better than they might do otherwise. It can

be overdone if they work to gain for themselves at the harm of others." (Zuck, p. 152)

Review of Literature on Positive or Negative experiences with competition

As I began to review the literature, I found that many proponents of cooperative learning had a negative bias against competition. Yet, when they shared their views they failed to cite specific examples of competition being harmful. The view in favor of competition was much stronger in showing the values and success stories of proper competition. In Duane M. Covrig's article "Sport, Fair Play, and Children's Concepts of Fairness" the author shares how competition can be used in the right way to teach children.

The primary purpose of sport is not to win the match, to catch the fish, or kill the animal, but to derive pleasure from the attempt to do so and to afford pleasure to one's fellow participants in the process. . . . Its purpose is to protect and cultivate the festive mood proper to an activity whose primary purpose is pleasant diversion, amusement, joy. (Keating, 1988, p. 245)

So competition should be a pleasurable experience for all involved. Some of the first values that can be learned are: taking turns, obeying the rules and feeling part of a group or community. (Covrig) An important part of any competition is the coaching/teaching. Without the proper coaching/teaching some negative results may be found. First, competitive sports can *breed intense animosity*. "Competitiveness . . . creates easily aroused envy towards the stronger ones, contempt for the weaker, distrust for everyone . . . so that satisfaction and reassurance which one can get out of human relationships are limited and the individual becomes more or less emotionally isolated" (Kohn, 1986, p. 141-142).

Second, competitive sports may *promote lower-level reasoning on moral issues*. Some

researchers have found that lower-level egocentric moral reasoning is used "when thinking about dilemmas in sport other than when addressing moral issues in other contexts" (Bredemeier & Shields, 1985 p. 25).

Third, competitive sports may *diminish perspective talking*. Under the condition of competition one may wish the failure of others and fail to associate another's disappointment with their own pleasure.

Fourth, competitive sports can *stifle the development of an ethic of service*. "When we compete, then, we objectify others, lose our ability to empathize, and become less inclined to help" (Kohn, 1986, p. 142).

Fifth, competitive sports can *reward and promote cheating*. Even with the rules, some competitive environments create such a strong pressure to win that some participants may feel compelled to cheat.

Sixth, competitive sports may *teach children to equate physical force with success*. Covrig does not cite cases or examples for these negative aspects. He suggests that studies in this area would be useful. He does give some excellent suggestions for the coach/teacher to help keep these negative results from happening. First, educators should *downplay winning* in sports. Awards can focus on other aspects of the game besides winning.

Second, leaders need to *explain the true essence of following the rules*. "Children's games constitute the most admirable social institutions. . . . All morality consists in a system of rules, and the essence of all morality is to be sought for in the respect which the individual acquires for these rules" (Piaget, p. 13). "When a rule ceases to be external to children and depends only on their free collective will, it becomes incorporated in the mind of each, and

individual obedience is henceforth purely spontaneous" (p. 71).

Third, *intramural sports should be preferred over interscholastic sports*. This allows former rivals to play together building more friendships rather than an us-versus-them attitude.

Forth, educators need to look for and *promote sports that downplay competition and promote cooperation and personal exercise*. Here is where we can link the positives of competition with the success of cooperative learning.

Some aggressive educators are finding that it is not a choice of either competition or cooperative learning. The two can be linked together to form one of the greatest learning tools yet. Cooperative/Competition is an important part in the development of cooperative learning. C/C uses the intergroup and individual competition to complement the emphasis on teamwork that is associated with cooperative learning. C/C is concerned with one of the most important issues in education: how to better motivate our students. The secret of adult learning success is that adult learners are motivated. If individuals want to learn, they find out how. One of the most encouraging things about C/C is that it can be applied in a many different forms. It can begin with one teacher in one classroom for part of one day or one subject once a week. It can eventually increase to encompass an entire school, or even several cooperating schools.

The entire process of C/C is to put learning into a game, and "games," are enjoyable activities. Even purposeful and constructive activities can have game-like characteristics, if they are properly organized. And game characteristics make activities enjoyable because of the collective competition and cooperation, and the social engagement they generate.

C/C takes a strong pro-competition position. Some educators hold strong views against competition because they feel that young children can be subjected to excessively intense

competitive pressures. But educator resistance to competition sometimes goes too far. For example, many anti-competition educators make no distinction between zero-sum and non-zero-sum competition. That distinction is important. Some proponents of cooperative learning, such as Slavin, support inter-team competition. But others, such as Johnson and Johnson, depreciate the idea of competition. They believe such competition is destructive. The problem with this belief is that many of these students who are shielded from competition often deliberately put in long hours in playgrounds playing highly competitive sports just for fun. They escape from the boring academic work to pursue game-like competitions in athletic activities. The traditional classroom approach where some students get good grades and some get poor grades can be characterized as a zero sum game: a game where there must be a loser for every winner. The C/C approach utilizes a non-zero-sum framework, where students work together as a team. Team sports appeal to children because they enjoy high levels of competition. This is especially true when a non-zero-sum framework is used. Within this structure sometimes organizers take steps to equalize competition among athletic teams, typically by establishing leagues or otherwise weighting the competition for fairness.

Cooperative/Competition is best defined by its basic elements:

- X Students are grouped by their teachers into heterogeneous learning teams.
The average level of competency of each team is as equal to the other teams as possible, since the aim is balanced competition.
- X Teams compete against each other to see which can display mastery of a particular academic topic or other educationally beneficial activity.
- X Teachers must identify the subject of the competition, which usually is

their existing goals for improving student academic learning or conduct.

- X Desired learning outcomes are reorganized so that student performance can be tested and tabulated in team and individual grades. Sometimes such tabulation is simple. For example, in a math contest, one might total the scores for each team member and then calculate the average for the team. The team with the highest average score wins. Other activities require more elaborate record keeping.
- X Team scores are tabulated to publicly identify teams that are winners and runners-up. Often, individual player's scores also are tabulated and inserted into grade record. (Wynne, 1995, p. 9)

As educators we hope that students will want to earn good grades and will be disappointed with low grades. Unfortunately, for many students, an emphasis on individual grades is not enough motivation for learning. Despite the frustrations some forms of competition can generate, competition can be a powerful motivating force. Grading and competition that are harmful rely solely on the zero sum approach or a win/lose contest. C/C encourages competition in which players compete individually against each other but also cooperate in a team against an external opponent or obstacle. This is the non-zero-sum approach. This approach is evident in most group activities such as a band, choir, or drama presentations.

"In the ideal non-zero-sum situation, players strive both to excel over their teammates and to achieve a team victory. In this way, non-zero-sum games treat life as a series of overlapping circles. The individual 'circle' overlaps with other circles. Thus the individuals

cooperate and create larger, more encompassing circles. If a competitor becomes too self-centered he or she handicaps the large circle. The individual may win personally, but the team will lose. And the other team members will respond negatively toward the selfish member. Such negative peer pressure works positively, in this instance, to encourage cooperation within the competition." (Wynne, 1995, p. 20)

In the business world, employees are playing non-zero-sum games. They compete with each other within the company, and they also try to make the company succeed in the larger sense of business competitiveness. They must support one another inside the company, so the company itself will not fail. Most employers are concerned about inspiring both competitive and cooperative attitudes in the company. To bring our students into the real world we must teach cooperative competition. C/C gives teaching strategy that combines the successful elements of cooperative learning with the positive advantages of motivating competition.

My Opinion, based on the Research and Personal Experiences

It is my opinion that Cooperative /Competition is a strong approach that can be used as an effective part of education. Much of my view is based on a quiz program that has been successfully used both in the church and in the school classroom. We will look at these two programs which are using this approach with positive results. We will look at a Christian Education program for children age eight through eleven, called "Junior Bible Quiz," and at a fifth grade public school class using the same format for American History Quizzing.

Junior Bible Quiz

Junior Bible Quiz has become one of the fastest growing programs in children's ministry today. In 1978 there were only five teams in the nation, with less than fifty children involved.

Today, the program has grown to more than one thousand teams with over five thousand children involved nationally. The success of this program involves some exciting competition principles: First of all, an electronic buzzer set is used. The children enjoy the excitement of hitting the buzzer pad to make the light and buzzer go off. Two teams of four quizzers each sit at the buzzers. Each quizzer may activate their own buzzer at any point during the reading of the question. If they interrupt the question they must finish the question before giving the answer. Since the children are given the questions and the answers to study, most questions are interrupted before they are finished. If the answer is correct, the quizzer and the team is awarded ten, twenty or thirty points based on the difficulty of the question. If the answer is incorrect, half the point value is subtracted from the quizzer and the team total. There are twenty questions to a match and each quizzer may only answer six questions correct or three incorrect. This helps the quizzers work together as a team. They, with the help of a coach, must determine who will answer what questions. Many times the questions are divided among the team members so that each quizzer has a certain number of questions that they are responsible for. By dividing the questions and working as a team, they can be much faster and therefore a better team. Since third through sixth grade children love competition, Junior Bible Quiz provides an excellent way to teach proper competition. All the children are gaining valuable Bible knowledge that gives them a positive feeling whether their team wins or loses. The material learned for quizzing contains information on having proper attitudes toward others including the golden rule. "So in everything, do to others what you would have them do to you" (Matthew 7:12). There is a strong emphasis in this program on living an example of what the quizzers are learning. A strong coach/teacher can truly have a practical way of teaching the Bible knowledge.

Just as in competitive sports, the family support is essential. One father commented after attending his first quiz meet. "It was the most exciting day I ever spent." Often the whole family learns the material through family devotions. It has also been beneficial to have two or three children from the same family involved in Junior Bible Quiz because they study together and push each other to do well. It becomes Cooperative/Competition within the family. Many top quizzers have been from families with more than one quizzer.

The commitment needed for quizzing is a valuable form of discipline for children. Many parents of quizzers have seen marked improvement in their children's schoolwork, behavior and their relationships with peers. It has also given children the opportunity to learn social skills in talking and relating to adults. Since adults are the coaches and officials, there is much interaction between the quizzers and the adults. It is great to see former quizzers who are now: teachers, pastors, engineers and in other leadership roles. Many of them credit their success as adults to values and practices learned in Junior Bible Quiz.

It has been my observation that the program has been particularly successful with boys! Boys in this age group have been harder to motivate in church activities. As a whole, fewer boys are motivated through the traditional church activities involving crafts and music. But when a program involving competition was introduced, I saw many unmotivated boys become motivated to take part. They could associate this program with the fun they had experienced in team sports. The success rate the program is having is about the same for boys and girls, but boys, as a whole, tend to be more competitive in their nature. Perhaps this is because of more experience in team sports, or perhaps the nature of boys is more competitive. Which ever reason, the program has been very positive in motivating boys to learn.

The memorization and repetition needed for quizzing, keeps God's Word fresh in boys' and girls' hearts and minds. "Our current distaste for memorization is more pious than realistic. At an early age when their memories are most retentive, children have an almost instinctive urge to learn specific tribal traditions." (Hirsch, p. 30) The Fuller Theological Seminary recently reported that 75% of the children in our churches nationwide leave the church by age 14. The report goes on to say that 90% of that group never return. Recently the Illinois District surveyed past Junior Bible Quizzers and found that over 90% of former quizzers over age 14 are still in the church. Truly, Junior Bible Quiz helps ground children in the doctrinal beliefs of the church. They know not only what they believe but why they believe it.

Fifth Grade History Quizzing

This same quizzing approach has been brought into the public school classroom by a fifth grade teacher at Lincoln Elementary School in Minneapolis, Minnesota. Miss Rector related that the first year she taught fifth grade, she was stunned at how much basic historic knowledge the children lacked. They didn't even know about Christopher Columbus and his three ships. They didn't know who we fought in any war, and they only recognized a few President names. That first year she realized that teaching all of American History in one school year would be impossible. It was also pretty boring. The text book was good, but reading something once wouldn't make the information stick into their heads. She decided to use her knowledge of Junior Bible Quiz to make History fun.

Miss Rector took the History text book home over the summer and made the key words and main ideas from each lesson into questions. She tried to only use the ideas that she thought every American should know. There would be four types of questions. The 10 pointers are the

easiest, 20 pointers are a bit harder, and 30 pointers are the hardest. The last type of question is the Quotation Question. The children have to quote these perfectly.

The next year began by each child receiving a copy of all of the quiz questions for the year. A buzzer set was borrowed and brought it into the classroom. When the students saw it they got very excited. After showing them how the buzzer set worked, they did a practice match. This made most of the children very excited about studying. However, they were only competing against themselves and the thrill of the quizzing died out as the year progressed.

The next year, Miss Rector convinced Mrs. Delveaux to do the same thing with her class. They decided to get their classes together every 4-6 weeks for a quiz match. The students studied the first couple of chapters and had their first match. Miss Rector's class trampled Mrs. Delveaux's class. One of the success factors of C/C involves balanced competition to encourage the students to keep studying, so it was good when Mrs. Delveaux's class won the next time.

The students learned History thoroughly because of the competition. They wanted to study and kept it up the entire year. They also began helping each other study. When they had any free time they would get out their quiz questions and study together. Each student had a Master Certificate on the bulletin board and when they passed each chapter they got a sticker. Then they got a Master Seal and a frame. The students even worked ahead. One student got his Master Seal in April - two months before the end of the year. After he got it, Miss Rector gave him the job of helping someone else get it. In this way cooperation began to develop. These students even started helping the special education students. Miss Rector related, " One student came up to me one day and asked if he could take the quiz questions home to study. I almost started to laugh. 'Oh, I guess,' I said sarcastically. I had rarely seen such excitement about

anything, especially with the boys. They seemed to rally around the competition aspect." Just as in the Bible Quiz program, some girls are not as competitive as the boys, but they all learn the questions and are willing to try with a little prodding.

The key to any competition program is the teacher/coach. They must make it fun to learn in a positive environment. There is much more to learn than the material the children are quizzing on. There are many of life's lessons that can be taught in the C/C environment. In the history quiz program, when the students get two questions right in a match, they quiz out and get 10 bonus points. The students are excited when someone quizzes out of course. When a student gets two wrong the student has quizzed out backwards. They sit out and a replacement quizzier comes in. The challenge came one day when one of the students quizzed out backwards. Some of the students from this class were mad and said some unkind things to him. The boy looked very sad and this was an opportunity for the teacher to teach about sportsmanship. She told the class that Kelly had done his best. They all knew that Kelly had his Master Seal and that he just had a bad match. They discussed that at least he tried and he did better than a lot of other people who didn't try. The class came up with the words they should say when someone quizzes out backward or forward. They have also had to discuss sportsmanship between the classes. The teachers had to model the behavior that they expected. They told the class that they expected to see, and hear from good sports.

Just as in the Bible Quiz program, some students who usually aren't interested in school, became very interested in the quiz program. The students self-esteem rose and they felt that they knew things that even some of their parents didn't know. Another great part about the quiz program is that the students are able to study with their parents which brings families together.

It has also been noticed that some of the kids who didn't have many friends, but were

good at quizzing started becoming popular. Everyone wanted them on their team. Quizzing brought them out of their shells and made them feel important and more likable.

By the end of the year, Miss Rector's and Mrs. Delveaux's classes knew much more about history than the other two fifth grade classes because they heard the quiz questions over and over again during quiz matches. They kept studying because the quiz matches included all of the questions. Miss Rector said, "I am convinced that quizzing is the best way to teach factual information to put it into long term memory. The concepts come as we teach the lessons that go with the questions."

Cooperative Competition and my Philosophy of Education

When I was in grade school in the 1950's, I remember being very embarrassed during the spell down competition. Each student was singled out and given a word to spell. If you missed on your word you were out! It did not matter how many of the other words you knew. No one ever knew that. They just knew that you missed the word you were given. I believe this was a very negative competition.

The Cooperative competition of "Junior Bible Quiz" and the History Quizzing is a great replacement for the old style of competition. It saves the embarrassment of being singled out when given a question. The children all have an opportunity to hit their buzzer when they have the confidence to do so. I believe the non-zero-sum approach allows for one of the greatest learning environments that can be created. The system not only benefits individuals, but also encourages team members to stimulate each other toward improvement. In the traditional classroom, all that academic stars do is embarrass their less adequate peers. In the C/C approach students are glad their star helps them be a part of a winning team.

It is true that more research would be beneficial in this area, but all the signs currently

point to very positive results from Cooperative competition. With the strong teacher/coach, the academic and social benefits to children far outweigh any negative aspects.

During the past few years I have had the opportunity to informally interview former Junior Bible Quiz team members. The people I have talked with are now adults in all walks of life. The question I asked all of them was: What lasting effects (positive or negative) did your JBQ experience have on your life? There were no negative aspects mentioned by any of the young people that I talked with. All of them had very positive comments. Some of these comments are listed below:

As an attorney I have spent many years in school. The fundamental exercise of memorization and discipline to study that I learned in Junior Bible Quiz has had an extremely positive impact on my entire academic life. I feel like it gave me an edge on study techniques. The positive competition that I learned in JBQ has stayed with me into my profession today. Being an attorney is at times much like the competition of a quiz match. I must compete in the court room, I must know how to conduct myself in a competitive environment, how to address authority, how to keep my attitude in check and handle myself under pressure, all things I learned in Junior Bible Quiz Competition. (Matthew Engelking - Attorney At Law, Minneapolis, MN)

Junior Bible quiz was a positive influence on my entire academic life. It helped stimulate my mind and establish good study habits. (Janine Kruger MD - Medical Physician, Milwaukee, WI)

Junior Bible Quiz helped me learn how to study and have confidence in my ability to memorize things. It showed me that good study habits pay off

because our team did well. It was not fun to study but I learned that you get results when you take time to do it. I learned that you can learn things that might be boring or difficult in fun ways. This is what I want to do for my students as a teacher. (Dawn Rector - 5th Grade School Teacher, Minneapolis, MN)

If there wasn't the competitive aspect of Junior Bible Quiz, I would never have been involved with it. I loved the competition of JBQ as much as any sport that I was ever in. Those were the best years of my life. It was a big part of my spiritual growth because the truth of God's word got in my mind and heart. It gave me a foundation for the rest of my life. Today when I am faced with choices and decisions, I still remember scriptures I learned during my Junior Bible Quiz days. It helped me start a strong devotional life. The discipline of studying the Bible every day helped me establish good habits. Also, I made a lot of friends during my quizzing years. It helped me come out of my shell and develop relationships with people. (Lance Loven - Youth Pastor, Kerney, NE)

These are just a few of the hundreds of people the Junior Bible Quiz program has affected. I truly believe in the use of Cooperative/Competition. I have seen the benefits first hand. I will continue to use and support this method of education both in religious education and in secular education.

On December 30, 1995, One of my former Junior Bible Quizzers, Darryl Issacs was tragically killed in an automobile accident. The following were the final words of my eulogy at his funeral.

If this were a quiz match today and we were on the final question, Darryl would answer correctly! It may sound something like this: Question. Question number

20 for 20 points. Quotation Question. Quote the verse of Philippians that expresses what the Christians' attitude should be toward both life and death. "Red two," the quizmaster would call. Darryl would respond with the quote: "Philippians 1:21 For to me to live is Christ and to die is gain."

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